The Pump Handle The Pump Handle



"I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day."

John Snow, 1855

May 2016 Topics

- Bicillin L-A® Delay Lindsey VanderBusch
- West Nile Virus Testing at the NDDoH Laura Cronquist
- Hantavirus Pulmonary Syndrome Michelle Feist
- CDC Investigating Burkholderia Cepacia Infection Clusters in PICUs Faye Salzer



Bicillin L-A® Delay

Penicillin G benzathine is the recommended treatment for syphilis and the only recommended treatment for pregnant women infected or exposed to syphilis. Pfizer, the sole manufacturer of Bicillin L-A® (penicillin G benzathine) in the United States, is experiencing a manufacturing delay of this product. The Centers for Disease Control and Prevention's (CDC) Division of STD Prevention (DSTDP) is working with the United States Food and Drug Administration's (FDA) Drug Shortage Staff and Pfizer to address this situation.

Pfizer is currently releasing weekly allocations to wholesale distributors to prevent stock outs. Normal supplies are expected to resume by July 2016. Until normal quantities of Bicillin L-A[®] (penicillin G benzathine) are available, CDC suggests the following:

- Discourage the use of penicillin G benzathine for treatment of other infectious diseases (e.g. streptococcal pharyngitis) where other effective antimicrobials are available.
- Encourage the adherence to the recommended dosing regimen of 2.4 million units of penicillin G benzathine IM for the treatment of primary, secondary and early latent syphilis (early syphilis) as outlined in the 2015 STD Treatment Guidelines. Additional doses to treat early syphilis do not enhance efficacy, including patients living with HIV infection.

If your facility is having issues acquiring penicillin G benzathine for the treatment of syphilis cases, please contact the North Dakota Department of Health (NDDoH), Division of Disease Control at 701.328.2378 or at 800.472.2180.

More information on syphilis treatment and clinical management can be found in the <u>2015 STD</u> <u>Treatment Guidelines</u> (<u>http://www.cdc.gov/std/tg2015/syphilis.htm</u>). CDC is not recommending any changes to treatment recommendations for patients with syphilis.

Additional information on the availability of penicillin G benzathine can be found at http://www.cdc.gov/std/treatment/drugnotices/bicillinshortage.htm or on the FDA's Drug Shortage website.



West Nile Virus Testing at the NDDoH

West Nile virus (WNV) disease should be considered in any person with a febrile or acute neurologic illness who has had recent exposure to mosquitoes, blood transfusion, or organ transplantation, especially during the summer months in areas where WNV activity has been reported. The NDDoH offers free testing through September 30, 2016, on specimens from patients who have at least one sign or symptom suggestive of WNV disease. Clinical signs and symptoms of WNV are as follows:

WNV Neuroinvasive Disease

- Signs of brain dysfunction (e.g., altered mental status, confusion, coma, disorientation, stupor)
- Signs of other neurologic dysfunction (e.g., stiff neck, sensory deficits, abnormal reflexes or movements, paralysis, cerebrospinal fluid pleocytosis)

WNV Non-neuroinvasive Disease

- The presence of fever (chills) as reported by the patient or health care provider and at least one additional symptom such as:
 - Headache, myalgia, arthralgia, malaise, skin rash, photophobia, lymphadenopathy, vomiting, vertigo, paresis, etc.

The NDDoH Division of Laboratory Services (DLS) provides WNV IgM antibody testing on serum and CSF specimens. Testing is performed at the DLS on Mondays and Wednesdays. Additional days will be added to the testing regime as sample submission increases. Positive screening and positive confirmatory results will be confirmed to health care providers the day testing is completed.

Since WNV activity was first identified in North Dakota in 2002, human cases have been reported from every county. In 2015, 23 human cases were reported to the NDDoH. Eight of those cases were neuroinvasive, of which one resulted in death.

For more information about WNV testing, please contact the DLS at 701.328.6140. To learn more about WNV surveillance, including current activity in North Dakota, please contact the Division of Disease Control at 701.328.2378.



Hantavirus Pulmonary Syndrome

Hantavirus Pulmonary Syndrome (HPS) is a severe, sometimes fatal, respiratory disease in humans caused by infection with hantavirus. Anyone who comes into contact with rodents that carry hantavirus is at risk of HPS. The virus is shed in the urine, droppings and saliva of infected rodents. The virus is mainly transmitted to people when they breathe in air contaminated with the virus. Any activity that puts you in contact with rodent droppings, urine, saliva or nesting materials can place you at risk for infection. Certain activities can put you at an increased potential risk for HPS, such as opening and cleaning unused buildings (e.g., cabins or barns that have been closed during the winter); housecleaning activities; work-related exposures where individuals work in crawl spaces, under houses or in vacant buildings that have a rodent population; and camping and hiking when using infested trail shelters or camps in rodent habitats.

Early symptoms of HPS include flu-like symptoms with fever, headache, muscle ache and malaise. Nausea, diarrhea and vomiting may also occur. Four to 10 days after the initial phase, late symptoms appear including coughing and shortness of breath. HPS can be fatal. The NDDoH Division of Laboratory Services offers hantavirus testing when testing to rule out other potential diagnoses has been exhausted (e.g., influenza). Testing criteria include patient's that are hospitalized and acutely ill (<1-1½ weeks) with a respiratory infection. Treatment is supportive with attention to fluids, electrolytes and blood pressure management. Additional information regarding the clinical management of HPS can be found at www.cdc.gov/hantavirus/technical/hps/treatment.html.

The NDDoH offers the following tips for cleaning a building with signs of rodent infestation to avoid hantavirus infection:

- Ventilate the space by opening doors and windows for 30 minutes before you start cleaning
- Do not stir up dust by sweeping or vacuuming up droppings, urine or nesting materials
- Wear gloves and use disinfectant when cleaning up dead rodents or their urine, droppings and nests
- Saturate the material with disinfectant for five minutes before removal
- Mop floors and clean countertops, cabinets and drawers with disinfectant
- Use a commercial EPA-registered disinfectant following the label instructions or a bleach solution made with one-part bleach and nine parts water

Fourteen cases of HPS have been reported to the Department of Health since 1993, when the virus was first recognized in the United States. Seven of the 14 reported cases were fatal. One case was reported in 2015; this individual has since recovered.

For more information on laboratory testing for hantavirus, please call the NDDoH Division of Laboratory Services at 701.328.6272.

For more information on HPS, please call the NDDoH Division of Disease Control at 701.328.2378 or 800.472.2180, or visit www.ndhealth.gov/disease.



CDC Investigating Burkholderia Cepacia Infection Clusters in PICUs

The U.S. Centers for Disease Control and Prevention (CDC) is working with the Food and Drug Administration and health departments to investigate clusters of healthcare-associated *Burkholderia cepacia* (*B. cepacia*) infections. CDC has received multiple reports of infection clusters, mostly involving patients without cystic fibrosis who are being treated in pediatric intensive care units (PICUs). Some isolates from at least two states have matching strain types, suggesting a potential common source. Additional isolates from other states are being tested. The CDC requests that health care professionals report *B. cepacia* infection clusters directly to CDC by emailing Matthew Crist in the Division of Healthcare Quality Promotion at cwu0@cdc.gov. You can also report to your local or state health department. Read more about *Burkholderia cepacia* at www.cdc.gov/HAI/organisms/bCepacia.html.



Terry Dwelle, MD, MPHTM, State Health Officer Kirby Kruger, Director, Division of Disease Control; Chief of Medical Services Section Tracy K. Miller, PhD, MPH, State Epidemiologist Kelsie Howes, Managing Editor